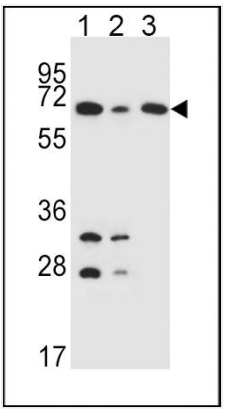
DLAT Antibody – Rabbit Polyclonal

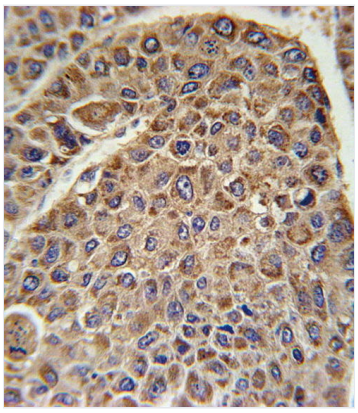
PRODUCT OVERVIEW

Product Name	DLAT, Polyclonal Antibody
Full Product Name	DLAT, CT (DLAT, DLTA, Dihydrolipoyllysine-residue acetyltransferase component of pyruvate dehydrogenase complex, mitochondrial, 70kD mitochondrial autoantigen of primary biliary cirrhosis, Dihydrolipoamide acetyltransferase component of pyruvate dehydroge
Product Gene Name	anti-DLAT antibody
Product Synonym Names	DLAT; DLTA; Dihydrolipoyllysine-residue acetyltransferase component of pyruvate dehydrogenase complex, mitochondrial; 70kD mitochondrial autoantigen of primary biliary cirrhosis; Dihydrolipoamide acetyltransferase component of pyruvate dehydrogenase complex; M2 antigen complex 70kD subunit; Pyruvate dehydrogenase complex component E2
Clonality	Polyclonal
Isotype	IgG
Host	Rabbit
Species Reactivity	Human
Form/Format	Supplied as a liquid in PBS, pH 7.2. No preservative added. Labeled with MaxLight650.
Purity/Purification	Purified by Protein A and Peptide Affinity Chromatography.
Specificity	Recognizes human DLAT.
Preparation and Storage	Store product at 4 degree C in the dark. DO NOT FREEZE! Stable at 4 degree C for 12 months after receipt as an undiluted liquid. Dilute required amount only prior to immediate use. Further dilutions can be made in assay buffer. Caution: MaxLight650 conjugates are sensitive to light. For maximum recovery of product, centrifuge the original vial prior to removing the cap.
Molecular Weight	68,997 Da
OMIM	245348
3D Structure	ModBase 3D Structure for P10515
Immunogen	KLH-conjugated synthetic peptide mapping to a fragment of residues within amino acids 579-607 in the C-terminal region of human DLAT.
Conjugate	MaxLight650
Note	Preservative Free
Product Categories/Family for anti-DLAT antibody	Antibodies; Enzymes; Acetyltransferase
Applications Tested/Suitable for anti-DLAT antibody	Immunohistochemistry (IHC) Paraffin, Western Blot (WB), Flow Cytometry (FC/FACS), FLISA
Application Notes for anti-DLAT antibody	Applications are based on unconjugated antibody.
Related Product Information for anti-DLAT antibody	MBS6292286 is an antibody targeting DLAT. Also known as DLAT, CT (DLAT, DLTA, Dihydrolipoyllysine-residue acetyltransferase component of pyruvate dehydrogenase complex, mitochondrial, 70kD mitochondrial autoantigen of primary biliary cirrhosis, Dihydrolipoamide acetyltransferase component of pyruvate dehydroge. Reactive in Human. Host: Rabbit.
Product References and Citations for anti-DLAT antibody	1. Trynka, G., et al. Gut 58(8):1078-1083(2009). 2. Lleo, A., et al. Hepatology 49(3):871-879(2009). 3. Korotchkina, L.G., et al. FEBS Lett. 582(3):468-472(2008).

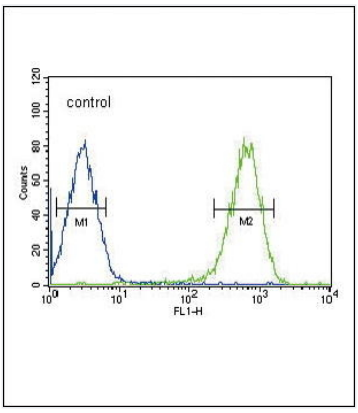
Other Notes	Small volumes of anti-DLAT antibody vial(s) may occasionally become entrapped in the seal of the product vial during shipment and storage. If necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the container`s cap. Certain products may require to ship with dry ice and additional dry ice fee may apply.



Western Blot (WB) of anti-DLAT antibody
Western Blot analysis in K562 (lane 1), HepG2 (lane 2), Jurkat (lane 3) cell line lysates (35ug/lane) usingMBS6005422. This demonstrates that MBS6005422 detected the DLAT protein (arrow).



Immunohistochemistry (IHC) of anti-DLAT antibody
Immunohistochemistry analysis in formalin fixed and paraffin embedded human hepatocarcinoma using MBS6005422 followed by peroxidase conjugation of the secondary antibody and DAB staining. This data demonstrates the use of MBS6005422 for immunohistochemistry.



Flow Cytometry (FC/FACS) of anti-DLAT antibody
Flow Cytometric analysis of HepG2 cells (right histogram) using MBS6005422 compared to a negative control cell (left histogram). FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

ADDITIONAL DETAILS

NCBI/Uniprot data below describe general gene information for DLAT. It may not necessarily be applicable to this product.

NCBI GI #	31711992
NCBI GeneID	1737
NCBI Accession #	NP_001922.2
UniProt Primary Accession #	P10515
UniProt Secondary Accession #	Q16783; Q53EP3
UniProt Related Accession #	P10515
GenBank Nucleotide #	NM_001931.4
NCBI Official Full Name	dihydrolipoyllysine-residue acetyltransferase component of pyruvate dehydrogenase complex, mitochondrial
NCBI Official Synonym Full Names	dihydrolipoamide S-acetyltransferase
NCBI Official Symbol	DLAT

NCBI Official Synonym Symbols	DLTA; PDCE2; PDC-E2
UniProt Protein Name	Dihydrolipoyllysine-residue acetyltransferase component of pyruvate dehydrogenase complex, mitochondrial
UniProt Synonym Protein Names	70 kDa mitochondrial autoantigen of primary biliary cirrhosis; PBC; Dihydrolipoamide acetyltransferase component of pyruvate dehydrogenase complex; M2 antigen complex 70 kDa subunit; Pyruvate dehydrogenase complex component E2; PDC-E2; PDCE2
Protein Family	Dihydrolipoyllysine-residue acetyltransferase component of pyruvate dehydrogenase complex
UniProt Gene Name	DLAT
UniProt Synonym Gene Names	DLTA; PBC; PDC-E2; PDCE2
UniProt Entry Name	ODP2_HUMAN
NCBI Protein Information	dihydrolipoyllysine-residue acetyltransferase component of pyruvate dehydrogenase complex, mitochondrial; 70 kDa mitochondrial autoantigen of primary biliary cirrhosis; E2 component of pyruvate dehydrogenase complex; M2 antigen complex 70 kDa subunit; PBC
NCBI Summary for DLAT	This gene encodes component E2 of the multi-enzyme pyruvate dehydrogenase complex (PDC). PDC resides in the inner mitochondrial membrane and catalyzes the conversion of pyruvate to acetyl coenzyme A. The protein product of this gene, dihydrolipoamide acetyltransferase, accepts acetyl groups formed by the oxidative decarboxylation of pyruvate and transfers them to coenzyme A. Dihydrolipoamide acetyltransferase is the antigen for antimitochondrial antibodies. These autoantibodies are present in nearly 95% of patients with the autoimmune liver disease primary biliary cirrhosis (PBC). In PBC, activated T lymphocytes attack and destroy epithelial cells in the bile duct where this protein is abnormally distributed and overexpressed. PBC enventually leads to cirrhosis and liver failure. Mutations in this gene are also a cause of pyruvate dehydrogenase E2 deficiency which causes primary lactic acidosis in infancy and early childhood.[provided by RefSeq, Oct 2009]
UniProt Comments for DLAT	DLAT: the E2 component of the pyruvate dehydrogenase complex (PDHC) that catalyzes the overall conversion of pyruvate to acetyl-CoA and CO2. Contains two lipoyl-binding domains. The PDHC plays a major role in controlling the balance between lipid and glucose oxidation depending on substrate availability. The activity of the PDHC is tightly regulated by phosphorylation of the E1 components by the PDHKs. The pyruvate dehydrogenase (PDH) holoenzyme is a multi-enzyme complex (PDHC) that contains 20-30 copies of pyruvate decarboxylase tetramers (2 alpha:2 beta)(E1), 60 copies of dihydrolipoamide acetyltransferase (E2), six homo-dimers of dihydrolipoamide dehydrogenase (E3), plus E3 binding proteins. PDHKs are recruited to the PDHC by binding to a lipoyl group covalently attached to K174 of the inner lipoyl domain of the E2 component. Protein type: Carbohydrate Metabolism - pyruvate; Carbohydrate Metabolism - glycolysis and gluconeogenesis; EC 2.3.1.12; Transferase; Carbohydrate Metabolism - citrate (TCA) cycle; Mitochondrial Chromosomal Location of Human Ortholog: 11q23.1 Cellular Component: mitochondrion; mitochondrial matrix; mitochondrial pyruvate dehydrogenase complex Molecular Function: dihydrolipoyllysine-residue acetyltransferase activity; protein binding Biological Process: cellular metabolic process; tricarboxylic acid cycle; glucose metabolic process; regulation of acetyl-CoA biosynthetic process from pyruvate; pyruvate metabolic process Disease: Pyruvate Dehydrogenase E2 Deficiency
Research Articles on DLAT	**1.** ongoing activation of PDCE2-specific B-cells in primary biliary cirrhosis
Precautions	All of MyBioSource's Products are for scientific laboratory research purposes and are not for diagnostic, therapeutics, prophylactic or in vivo use. Through your purchase, you expressly represent and warrant to MyBioSource that you will properly test and use any Products purchased from MyBioSource in accordance with industry standards. MyBioSource and its authorized distributors reserve the right to refuse to process any order where we reasonably believe that the intended use will fall outside of our acceptable guidelines.

Disclaimer	While every efforts were made to ensure the accuracy of the information provided in this datasheet, MyBioSource will not be liable for any omissions or errors contained herein. MyBioSource reserves the right to make changes to this datasheet at any time without prior notice. It is the responsibility of the customer to report product performance issues to MyBioSource within 30 days of receipt of the product. Please visit our Terms & Conditions page for more information.
Product Note	Select online data sheet information is drawn from bioinformatics databases, occasionally resulting in ambiguous or non-relevant product information. It is the responsibility of the customer to review, verify, and evaluate the information to make sure it matches their requirements before purchasing the kit. Our ELISA Kit assays are dynamic research tools and sometimes they may be updated and improved. If the format of this assay is important to you then please request the current manual or contact our technical support team with a presales inquiry before placing an order. We will confirm the current details of the assay. We cannot guarantee the sample manual posted online is the most current manual, it is intended to serve as an example only. Please refer to the instructions For Use provided with the assay kit for precise details.

For Research Use Only. Not for use in diagnostic or therapeutic procedures.

MyBioSource | Tel: +1.858.633.0165 | Fax: +1.858.633.0166 | mybiosource.com/contact-us
Online datasheet: https://www.mybiosource.com/polyclonal-human-antibody/dlat/6292286